

First Phase of the Evaluation of WISE EARS! Campaign in Industrial Workers,
Hispanic/Latino/Latina Individuals, and Native American Youth Under 17 Years Old

Report on the Project

The National Institute on Deafness and Other Communication Disorders (NIDCD) is one of the institutes of the National Institutes of Health (NIH) and supports and conducts research and research training on the normal and disordered processes of human communication: hearing, balance, smell, taste, voice, speech, and language. NIDCD develops and disseminates information, based upon scientific discovery, to the public.

In December 1998, NIDCD began leading an effort to prevent noise-induced hearing loss (NIHL) in the public and the worker. More than 30 million Americans are exposed each day to damaging levels of noise. Ten million have already had irreversible damage to their hearing. NIHL is completely preventable. NIDCD wanted to create awareness about NIHL among all audiences, e.g. workers, employees, health professionals, teachers, parents, children, entertainment industry, unions, industry, state and local government workers, and the general public. They also wanted to motivate all audiences by ensuring understanding of the problem, understanding who is at risk and advocating the use of protective devices and changes in the workplace and foster the development of hearing loss prevention programs appealing to specific groups. NIDCD built a coalition of more than 85 organizations called WISE EARS! to accomplish both prevention awareness and motivate preventative action.

NIDCD identified several groups as under-reached, Hispanic/Latino/Latina audiences, African-American audiences, American Indians/ Native Americans and Industrial Workers. NIDCD undertook an evaluation of attitudes and messages for these underrepresented groups with a contractor, Caliber Associates in Fairfax VA. After consultation with NIDCD, Caliber developed a draft moderator's guide that would be adapted for each audience and a timeline for the focus groups. Dr. Issac Montoya, of the NIH Council of Public Representatives, offered a location in Houston Texas where, through current research, they had a great deal of information available on the participants. The other focus groups were held in Bismark North Dakota with Native American nursing students and, with the help of the National Institute on Occupational Safety and Health, CDC, in Fairmont West Virginia with coal miners who serve as health and safety representatives for local mines.

The moderator's guide was designed to identify several items. NIDCD wanted to know if the participants were knowledgeable about health in general and NIHL, specifically. NIDCD also wanted to know how participants get health information? And, what is their perception of health information from the federal government? Within the constraints for not overburdening the public, the study was designed in this initial fact-finding phase, to query in focus groups of nine participants. Finally, NIDCD wanted to know which were the appropriate messages and what were the appropriate channels for disseminating health information to these specific, underrepresented populations.

Several significant findings include:

1. Although coal mining representatives and American Indian nurses all understood the term "noise-induced hearing loss," participants in both groups in Houston, all female, had difficulty with the term but did understand that exposure to loud noise is bad for hearing.
2. While coal miners received information equally from television/radio, newspaper/magazines and doctor's office or clinic, and also used material from the federal government, none of them identified "family and friends" as a source of health information.
3. While Hispanic/Latina mothers received the most health information from family/friends and television/radio, they also received information from doctor's office or clinic and only one identified newspaper and magazines as a source of health information. None of the participants identified the federal government as a source for health information.
4. All of the miners know someone with hearing loss. Most of the African-American and Hispanic and Latina mothers know someone with hearing loss. Only three of the Native American nurses identified knowing someone with hearing loss.
5. "All of the participants had a favorable reaction to WISE EARS! materials"
Miners: would use to talk with workers, one volunteered he would write an article for next newsletter
Native American Nursing Students: needs to be easier to read and IMPORTANT, it is okay to use the WISE EARS! title, but to use Indian cultural symbols to accompany it. (Use the text, but not the owl). Several indicated they planned to use the materials in a lesson they are supposed to teach as part of their training.

African American and Hispanic/Latina mothers: focused on bookmark and flashlight, but did not read the fact sheets. Need to have materials with "people like us." Preferred bi-lingual to Spanish language only materials.
6. West Virginia Coal Miners: even though they are issued ear plugs, they don't wear them as they believe they will interfere with communication. Also, they believe that hearing loss from working in mines is "inevitable." They suggested placing materials in local union offices including posters and easy-to-read pamphlets; safety committee reps could distribute materials to miners on signs and post reminder messages inside the mines and approach mining companies to help develop materials targeted to mine owners. They believed this was an ideal time as mine owners are involved in settling first round of settlements for miner's claims for hearing loss. So, materials for mining company officials, union officials and safety officers and a third group of materials directly to the miners. They felt messages that involve the family are important, and suggested "It's important to protect your hearing now so you won't miss out on hearing your children say, 'I love you!'" This is actually a theme we use in a public presentation on WISE EARS!-What you'll miss. They suggested depicting family activities that include hearing

and encourage them to protect their children. They encouraged NIDCD to include union officials in the development of materials and ask them to disseminate information once it is developed. They thought that reminders for the mine area were important also.

7. Hispanic/Latina mothers did not appear to have clear understanding of NIHL. They did not consider it a problem. Folk remedies were mentioned including communicating with a deaf or hard of hearing person by rolling up a newspaper like a megaphone, inserting the small end in the individual's ear, and speaking into the broad end. The mothers did show interest in learning about NIHL and said they would read materials if they were presented in both English and Spanish and reflected their culture.

8. African American mothers found NIHL terminology difficult. "Some participants thought that NIHL meant 'tuning someone out because you don't want to hear them'." There was confusion between problems with hearing and ear infections. Cleaning the ears was seen as an important deterrent to ear disease. They did not have experience with looking for health information on their own, would trust information from a doctor or nurse, and, "in relation to their children, they would trust their own judgment." They wanted simpler material, material designed to hand out in a doctor's office or clinic or drug store or State service agencies, materials for children to be handed out in school, and inclusion of pictures of African Americans in the materials. Two women indicated they were going to share the materials with specific individuals.

9. American Indian Nursing students were the most knowledgeable about NIHL. They were able to identify causes as well as identify additional causes for deafness or hearing loss. Most important, they understood the risk for Indians due to types of work, living environment and behaviors. They expressed importance of spreading the message to both reservation and non-reservation people. They saw themselves as potential sources of information and several decided to teach a class on NIHL as partial fulfillment of their course of study. Some suggestions about modifications to current materials for Native American populations included connecting the ability to hear with learning about Indian culture and focus on materials for schools that children could absorb and share with their parents. HIS clinics should be stocked with posters using culturally appropriate graphics and easy to understand material. Include images of older adults for increased cultural credibility and have a student peer program using older students to teach younger students about NIHL.

General Findings

Overall, the common issues for NIDCD to address are there is little understanding of the importance of hearing to quality of life, problems with understanding causality between noise and "induced" and the goal of healthy hearing, lack of understanding why hearing is important and importance of folklore or cultural remedies. The starkest of these is the belief that hearing loss is the result of poor ear hygiene. The groups, with the exception

of miners, the participants seemed unaware of health information from the federal government. Mothers were unsure as to whether or not information received in Medicaid offices had been developed by federal agencies. The nursing students noted that the materials found in IHS waiting rooms were often out-of-date or nonexistent.

Action Items

NIDCD is developing an action plan for addressing the concerns that have not already been incorporated in the campaign. Further, we will share the results that are useful across institutes at the NIH Communication Directors meetings. We have, as a result of the focus groups, contracted for an Hispanic Communication Plan to improve our current Hispanic/Latino/Latina outreach.

We are grateful to the Office of Evaluation for making the funds available to us. Although focus groups may have the disadvantage of small numbers, they are extremely helpful in understanding perceptions of differing groups and they permit extended expression of ideas by individuals from underrepresented groups not possible in another methodology.

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